



# PATENT SPECIFICATION

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(54) Title Computer

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CS-579

Computer

The present invention relates to a computer.

5       According to the present invention there is provided  
a computer comprising a housing, on one face of which  
two sets of buttons are formed, and a cover, in which an  
aperture is defined, said cover being movably mounted  
relative to the housing between a closed state, in which  
10       the cover encloses a first set of said buttons with the  
second set of said buttons being operable through said  
aperture, to an open state, in which both sets of  
buttons are operable.

15       Preferably, said cover includes sealing means  
mounted around said aperture so that when the cover is  
in the closed state, said first set of buttons are  
substantially protected from ingress of material.

20       Preferably, said first set of buttons comprises a  
greater number of buttons than said second set of  
buttons.

25       An embodiment of the invention will now be  
described, by way of example, with reference to the  
accompanying drawings, in which:

30       Figure 1 is a plan view of a computer according to  
the invention;

Figure 2 is a cross-sectional view along the line  
AA-AA of Figure 1 of the drawings; and

Figure 3 is a cross-sectional view along the line CC-CC of Figure 1 of the drawings

Referring now to the drawings wherein similar  
5 numerals have been used to indicate like parts, there is shown a computer generally indicated at 10 according to the invention. The computer 10 comprises a shallow generally rectangular housing 11 to one longer side 14 of which a protective cover 12 is pivotally mounted on  
10 hinges 13 located at opposite ends of the side 14, Figure 2.

The housing 11 comprises an upper shell 15 fixed to a base 16. Four rows of holes 18 run parallel to and  
15 adjacent a long side 17 of the shell 15 opposite the side 14. A substantially rectangular hole 19 is formed in one half of the region of the shell 15 between the holes 18 and the edge 14. A further two parallel rows of holes 20 are formed in the region of the shell 15  
20 bounded by the holes 18, the hole 19 and the edge 14.

A PCB 21 is mounted within the housing 11, Figure 2. An elastomeric keypad 30 in which a plurality of buttons 22 are formed is mounted on the PCB. The buttons 22 have  
25 associated indicia (not shown) corresponding to the keys of a QWERTY type keyboard. The keypad 30 is mounted in the housing and the buttons 22 are so arranged so that each button 22 lies in register with and projects through a respective one of the holes 18 in the shell  
30 15.

A further elastomeric keypad 23 in which a plurality of buttons 24 are formed is mounted on the PCB. The buttons 24 preferably have associated indicia  
35 representing specialised functions for a particular application to which the computer will be used. The

keypad 23 is mounted beside the keypad 30 in the housing and the buttons 23 are so arranged so that each button lies in register with and projects through a respective one of the holes 20 in the shell 15.

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An LCD display 25 is mounted within the housing adjacent the PCB 30. The width of the PCB in this region is reduced to accommodate the LCD display 25, Figure 3. The display 25 is mounted in the housing to lie in register with the hole 19 and is glued to the inside edge 28 of the hole 19. A translucent panel 40 can be fixed over the outside of the hole 19 and protects the display from damage and ingress of water or other material. The display is electrically connected to the PCB by a flexible bus (not shown) in a conventional manner.

A substantially rectangular aperture 26 is formed in the protective cover 12. The aperture 26 is located so that when the protective cover 12 is closed over the housing 11, the aperture lies in register with the display 25 and the buttons 20. Thus, the display 25 and the buttons 20 are exposed and operable while the buttons 18 are covered and protected from damage.

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A rubber gasket 27 conforming to the outline of the aperture 26, is mounted on the inside surface of the cover 12 around the aperture 26. When the protective cover 12 is closed, the gasket substantially seals the region of the upper shell 15 of the housing around the display 25 and buttons 20 from ingress of water or other material.

It will be seen that the computer according to the invention is particularly applicable to outdoor activities, for example, for use as a golf scorecard.

In such an application, a microprocessor and associated electronics mounted on the PCB can be programmed so that a golfer can, in the surrounds of a clubhouse, enter details such as names and handicaps for a group of players, using the buttons 22. Once these details are entered, the program is set to prompt a user for the details of the round of golf which the group will play.

The protective cover 12 is then closed, and the golfer using the computer can enter the strokes played by each player during the round by using only the buttons 24. It will be seen that the buttons 24 can be used to record more detailed aspects of the round such as the number of fairways hit by each player during the round, the number of greens reached in regulation or the number of putts required.

The computer can preferably be provided with an infra-red transceiver or a serial cable socket (not shown), so that on returning to the clubhouse, the results of the round can be downloaded to a printer or to a central computer which can, for example, be used to adjust the golfers handicaps.

It will be seen that the computer according to the invention can be adapted for use in a number of applications, where detailed information is input or downloaded in a non-hazardous or non-exposed environment, and where information is gathered in an exposed environment.

CLAIMS:

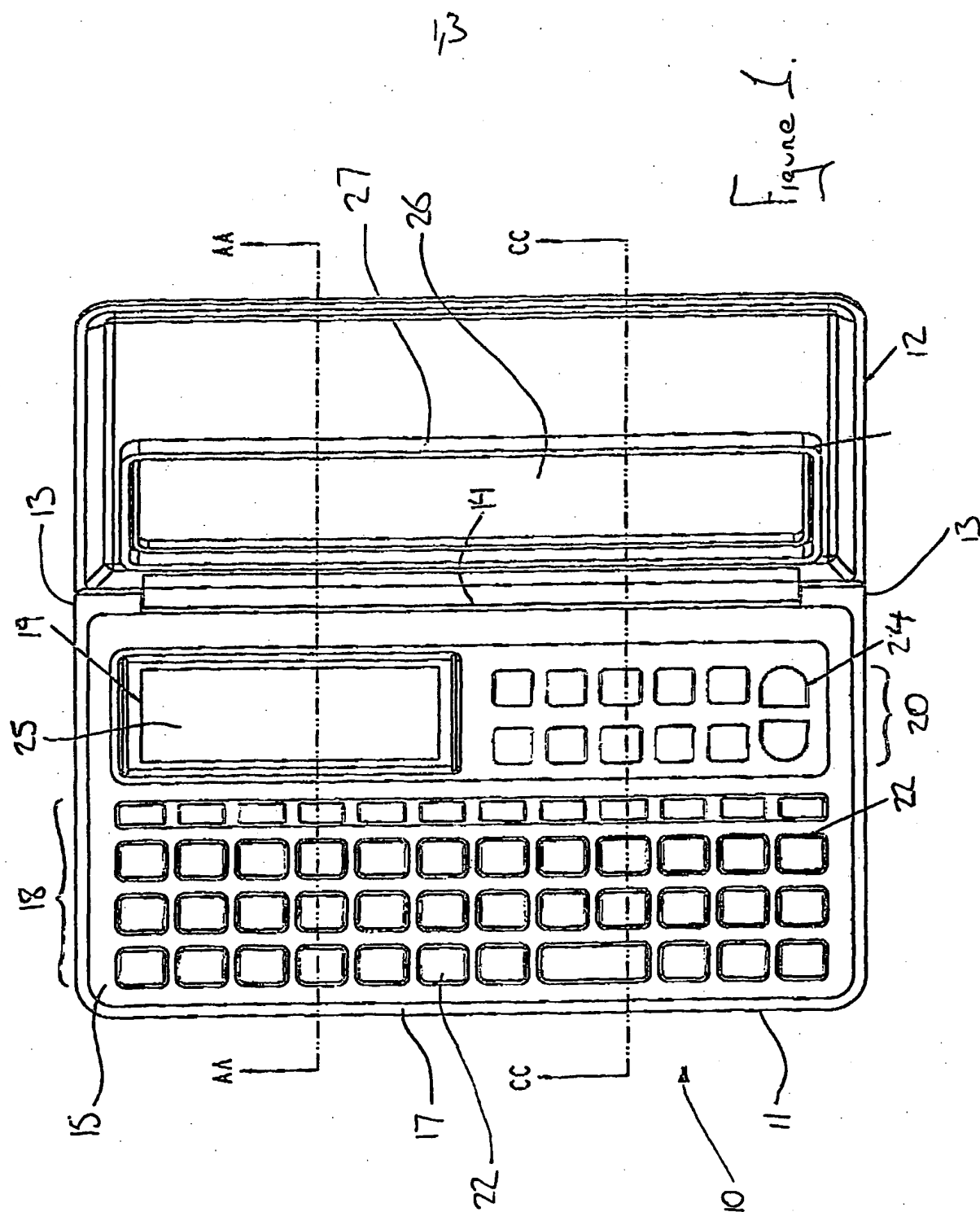
1. A computer comprising a housing, on one face of which two sets of buttons are formed, and a cover, in which an aperture is defined, said cover being movably mounted relative to the housing between a closed state, in which the cover encloses a first set of said buttons with the second set of said buttons being operable through said aperture, to an open state, in which both sets of buttons are operable.

2. A computer as claimed in Claim 1 wherein said cover includes sealing means mounted around said aperture so that when the cover is in the closed state, said first set of buttons are substantially protected from ingress of material.

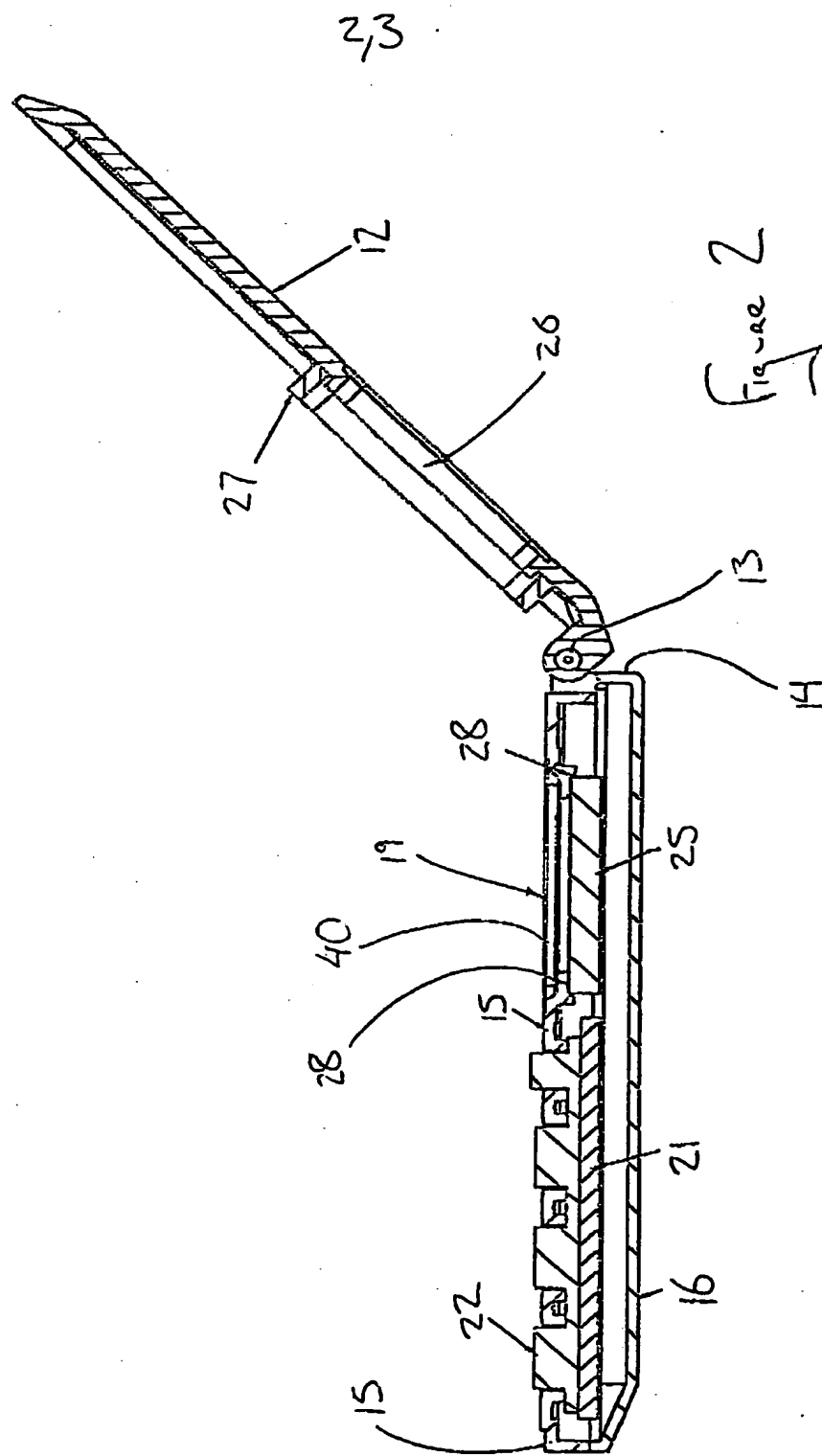
3. A computer as claimed in Claim 1 or 2 wherein said first set of buttons comprises a greater number of buttons than said second set of buttons.

4. A computer substantially as hereinbefore described with reference to the accompanying drawings.

F. R. KELLY & CO.  
Agents for the Applicant



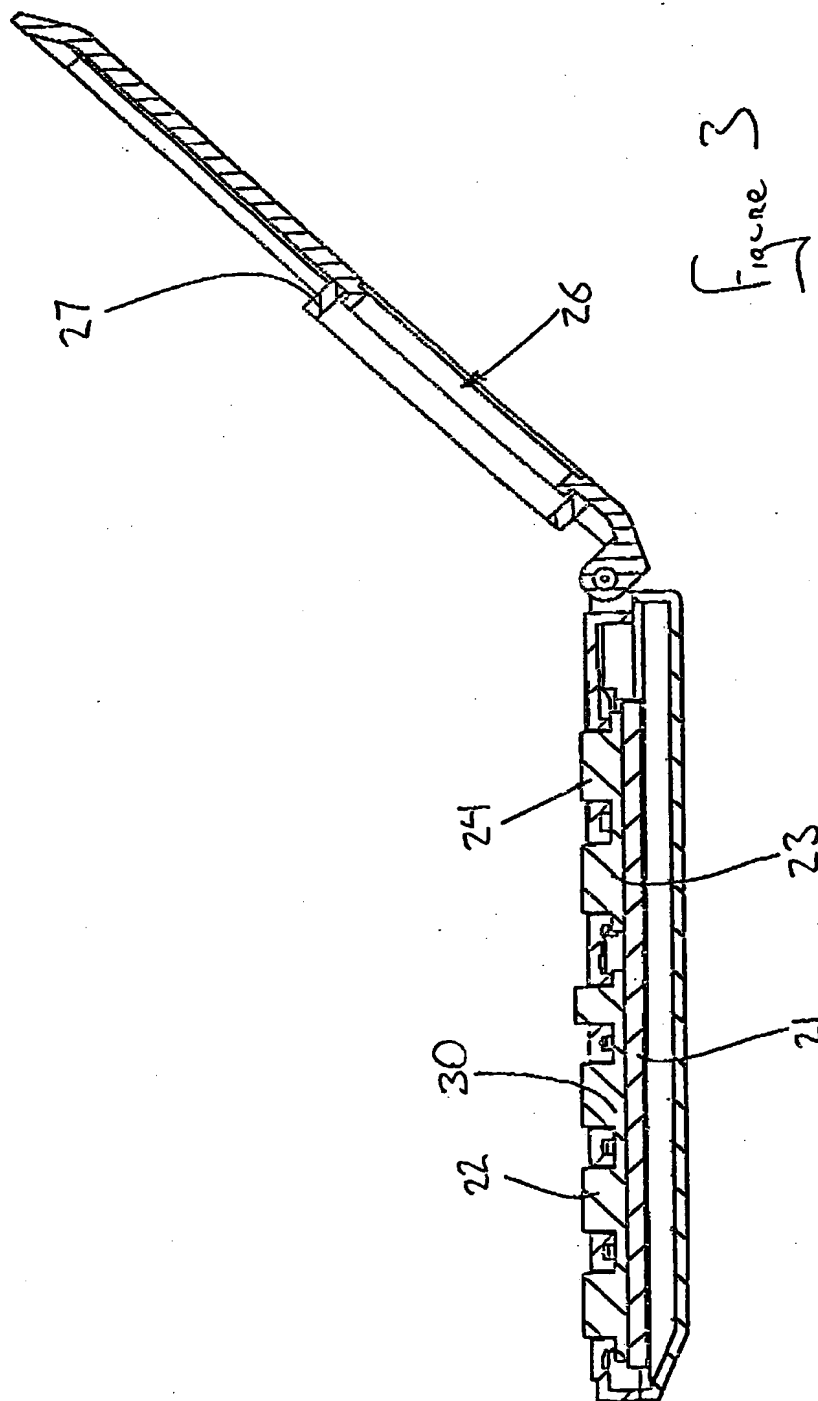
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